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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.  | CONFIRMATION NO. |
|-----------------|-------------|----------------------|----------------------|------------------|
| 09/943,304      | 08/30/2001  | Ruth Sarah Daly      | CA920010013US1/2179P | 8736             |

7590 08/25/2004

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| EXAMINER |
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FOWLKES, ANDRE R

|          |              |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

2122

DATE MAILED: 08/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/943,304

Applicant(s)

DALY, RUTH SARAH

Examiner

Andre R. Fowlkes

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) \*
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/30/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1-27 are pending.

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-3, 9, 10, 12, 13, 16, 17, 19, 20, 23 and 27 are rejected under 35 U.S.C. 102(a) as being anticipated by applicants admitted prior art, (AAPA), in the background section of the instant application. The paragraph and line numbers of the PGPUB application are used to cite the reference.

As per claim 1, AAPA discloses **a computer system for performing an action on a target model, wherein the target model is associated with a notify model, the target model comprising target objects and the notify model comprising notify objects** (§ 10:1-11:9, "It is known to those skilled in the art that programming code can be written, especially in object-oriented languages, to receive event notifications (i.e., the programming code is notified (to perform an action) when certain changes occur). Depending on the context, both source models and object models can be either a notify model, or a target model.... (for example), a file in the source model is changed and an

object model is modified in response to the file change. In this first exemplary scenario the source model is the notify model, and the object model is the target model”), **the computer system comprising:**

**- a model map for mapping the notify objects of the notify model to associated target objects in the target model** (§ 11:5-9, “(for example), a file in the source model is changed and an object model is (automatically) modified in response to the file change. In this first exemplary scenario the source model is the notify model, and the object model is the target model”, and the notify model must be mapped to the target model in order for the cited situation to occur),

**- an action operator for performing the action on one or more target objects in the target model in response to a modification of a selected notify object** (§ 11:5-9, “a file in the source model is changed and an object model is modified, (using an action operator), in response to the file change. In this first exemplary scenario the source model is the notify model, and the object model is the target model”, and, § 12:1-3, “a single instance of a notify model may consist of several models. Similarly, an instance of a target model may also consist of several models”)

**- wherein, the action operator performs the action on one or more identified target objects associated with the modified selected notify object, the one or more identified target objects being determined with reference to the model map** (§ 11:5-9, “(for example), a file in the source model is changed and an object model is (automatically) modified, (using an action operator), in response to the file change. In this first exemplary scenario the source model is the notify model, and the object model

is the target model”, and the notify models must be mapped to the target models in order for the cited situation to occur).

As per claim 2, the rejection of claim 1 is incorporated and further, AAPA discloses that **the notify model is a model of an object in an object oriented computer language and wherein the target model is source code associated with the object** (§ 11:7-9, “In this first exemplary scenario the source model is the notify model, and the object model is the target model”).

As per claim 3, the rejection of claim 1 is incorporated and further, AAPA discloses **means for generating an event notification signal when the selected notify object is modified, wherein the action operator performs the action responsive to receipt of the event notification signal** (§ 10:1-11:9, “It is known to those skilled in the art that programming code can be written, especially in object-oriented languages, to receive event notifications (i.e., the programming code is notified (to perform an action, using the action operator) when certain changes occur”).

As per claims 9, 10, 12, 13, 16, 17, 19, 20, 23 and 27, AAPA also discloses such claimed limitations as addressed in claims 1-3 above.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-8, 11, 14, 15, 18, 21, 22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicants admitted prior art, (AAPA), in the background section of the instant application in view of Atkinson et al., (Atkinson), U.S. Patent no. 5,613,124.

As per claim 4, the rejection of claim 1 is incorporated and further, AAPA doesn't explicitly disclose that **the model map is one of a lookup table and a database**.

However, Atkinson, in an analogous environment, discloses that **the model map is one of a lookup table and a database** (col. 3:36-39, "The virtual function table (i.e. lookup table) contains an entry (which maps a relationship) for each virtual function member defined for the object. Each entry contains a reference to the code that implements the corresponding function member").

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Atkinson into the system of AAPA to have the model map as a lookup table or a database. The

modification would have been obvious because one of ordinary skill in the art would want to use the well known lookup table or database in order to store and retrieve data, involved in complex relationships, in an organized and efficient fashion.

As per claim 5, the rejection of claim 4 is incorporated and further, AAPA doesn't explicitly disclose that the model map **maps portions of the notify objects to associated portions of the target objects.**

However, Atkinson, in an analogous environment, discloses that the model map **maps portions of the notify objects to associated portions of the target objects** (col. 33:31-33, "information that indicates which portion of the object is to be used for generating the (portion) of the presentation data", additionally, the AAPA and Atkinson references are directed toward object oriented technologies, wherein separating objects into their constituent parts, maintaining complex relationships involving objects and their constituent parts, and modification and the propagation of modifications involving objects and their constituent parts (without affecting the rest of the application) are common, well know techniques).

Therefore, it would have been obvious to a person of ordinary skill in the art, at the time the invention was made, to incorporate the teachings of Atkinson into the system of AAPA to have a model map that maps portions of the notify objects to associated portions of the target objects. The modification would have been obvious because one of ordinary skill in the art would want to exploit the numerous advantages



of object oriented technologies (e.g. minimizing the time or coding effort required to produce an application relying on the notify and target object relationship).

As per claim 6, the rejection of claim 5 is incorporated and further, AAPA discloses that **the action performed by the action operator is performed on the identified portions of the target objects in the target model, the identified portions of the target object being determined with reference to the model map** (§ 11:5-9, “(for example), a file in the source model is changed and an object model is modified, (using an action operator), in response to the file change. In this first exemplary scenario the source model is the notify model, and the object model is the target model”, and the portion of the notify model must be mapped to the portion of the target model in order for the cited situation to occur, additionally, the AAPA reference is directed toward object oriented technologies, wherein separating objects into their constituent parts, maintaining complex relationships involving objects and their constituent parts, and modification and the propagation of modifications involving objects and their constituent parts (without affecting the rest of the application) are common, well know techniques).

As per claim 7, the rejection of claim 6 is incorporated and further, AAPA discloses that **the notify model is a model of an object in an object oriented language and wherein the target object is source code** (§ 11:11-12, “In this second

exemplary scenario the object model is the notify model, and the source model is the target model”).

As per claim 8, the rejection of claim 7 is incorporated and further, AAPA discloses that **the action performed is a source code validation** (§ 18:1-3, “Presently, when a change in a notify model is completed, testing of the model (e.g., validating source code or the EJB in the examples described above, respectively) is (the action that is ) conducted”).

As per claims 11, 14, 18 and 21, the AAPA/Atkinson combination also discloses such claimed limitations as addressed in claim 4 above.

As per claims 15, 22 and 24-26 the AAPA/Atkinson combination also discloses such claimed limitations as addressed in claim 8 above.

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andre R. Fowlkes whose telephone number is (703)305-8889. The examiner can normally be reached on Monday - Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Tuan Q. Dam can be reached on (703)305-4552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ARF

A handwritten signature in black ink, reading "Hoangm Anthony Nguyen Ba". The signature is written in a cursive, flowing style.

ANTONY NGUYEN-BA  
PRIMARY EXAMINER